

Panaji, 8th November, 1990 (Kartika 17, 1912)

SERIES I No. 32

# OFFICIAL GAZETTE



## GOVERNMENT OF GOA

### GOVERNMENT OF GOA

#### Agriculture Department

#### ORDER

10-1-79-AGR VOL. VIII

Government of India, Ministry of Agriculture (Department of Agriculture and Cooperation), New Delhi Order No. 1-2/89-Fert-Law dated 31-8-1990 published in the Gazette of India (Extraordinary) Part II, Section 3, Sub-section (ii) is hereby republished in the Official Gazette for general information of the public.

*D. N. Accawade*, Under Secretary (Agriculture).

Panaji, 18th October, 1990.

#### ORDER

S.O. 675(E). In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following order further to amend the Fertiliser (Control) Order, 1985, namely:—

1. (1) This Order may be called Fertiliser (Control) (Fourth Amendment) Order, 1990.

(2) It shall come into force on the date of its publication in the Official Gazette.

2. In sub-section (3) of clause 13 of the Fertiliser (Control) Order, 1985, for the words "two years", the words "upto 27th July, 1991" shall be substituted.

Sd/-

(R. M. Sethi)

Joint Secretary to the Government of India.

*Note:*— 1. The Fertiliser (Control) Order, 1985 was published vide GSR (E) dated 25th September, 1985 and subsequently amended by,—

- (i) GSR 201(E) dated 14th February, 1986.
- (ii) GSR 1160(E) dated 21st October, 1986.
- (iii) S.O. 822(E) dated 14th September, 1987.
- (iv) S.O. 1079(E) dated 11th December, 1987.
- (v) S.O. 252(E) dated 11th March, 1988.
- (vi) S.O. 724(E) dated 28th July, 1988.
- (vii) S.O. 725(E) dated 28th July, 1988.

- (viii) S.O. 940(E) dated 11th October, 1988.
- (ix) S.O. 498(E) dated 29th June, 1989.
- (x) S.O. 581(E) dated 27th July, 1989.
- (xi) S.O. 763(E) dated 25th August, 1989.
- (xii) S.O. 738(E) dated 15th September, 1989.
- (xiii) S.O. 140(E) dated 12th February, 1990.
- (xiv) S.O. 271(E) dated 29th March, 1990.
- (xv) S.O. 403(E) dated 23rd May, 1990.

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### Department of Community Development and Panchayats

#### ORDER

1/15(2)/90-CDP

In exercise of the powers conferred by sub-section (1) of section 7 of Goa, Daman and Diu Village Panchayats Regulation, 1962 (No. 9 of 1962), read with Government Notification No. 1/15(6)/84-F&A (3) dated 19-10-1987, I, Bansi Dhar, Secretary (Panchayats), Government of Goa, hereby amend the Government Notification No. 1/15(2)/90-CDP dated 25-7-1990 published in the Official Gazette Series I, No. 21, dated 23rd August, 1990 (hereinafter referred to as the 'said Notification'), as follows:—

In the Schedule to the said Notification:—

- (i) in village Davorlim-Dicarpale of Salcete-Mormugao Block in Serial No. 7,—
  - (a) in column 5, for the figure '5', the figure '9' shall be substituted; and
  - (b) in column 6, for the figure '1', the figure '6' shall be substituted.
- (ii) in village Dharbandora of Sanguem Block in Serial No. 9,—
  - (a) in column 5, for the figure '5', the figure '7' shall be substituted; and
  - (b) in column 6, for the figure '1', the figure '6' shall be substituted.

*Bansi Dhar*, Secretary (Panchayats).

Panaji, 22nd October, 1990.

## Law (Legal and Legislative Affairs) Department

## Notification

10-6-90/LA

The following Notifications received from the Government of India, Ministry of Environment and Forests (Department of Environment, Forests and Wildlife), New Delhi, are hereby published for the general information of the public.

P. V. Kadnekar, Under Secretary (Drafting).

Panaji, 6th February, 1990.

## MINISTRY OF ENVIRONMENT AND FORESTS

(Department of Environment, Forests and Wildlife)

## Notification

New Delhi, the 27th October, 1989

G.S.R. 931(E).—In exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:—

1. (1) These rules may be called the Environment (Protection) Second Amendment Rules, 1989.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Environment (Protection) Rules, 1986 (hereinafter referred to as the principal rules), in rule 2,—

(i) after clause (a), the following clause shall be inserted, namely:—

“(aa)” “areas” means all areas where the hazardous substances are handled;”;

(ii) after clause (e), the following clause shall be inserted, namely:—

“(ee) “prohibited substance” means the substance prohibited for handling;”.

(iii) after clause (f), the following clause shall be inserted, namely:—

“(f) “restricted substance” means the substance restricted for handling;”.

3. In the principal rules, after rule 12, the following rule shall be inserted, namely:—

“13. Prohibition and restriction on the handling of hazardous substances in different areas:—

(1) The Central Government may take into consideration the following factors while prohibiting or restricting the handling of hazardous substances in different areas:—

(i) The hazardous nature of the substance (either in qualitative or quantitative terms as far as may be) in terms of its damage causing potential to the environment, human beings, other living creatures, plants and property;

(ii) the substances that may be or likely to be or readily available as substitutes for the substances proposed to be prohibited or restricted;

(iii) the indigenous availability of the substitute, or the state of technology available in the country for developing a safe substitute;

(iv) the gestation period that may be necessary for gradual introduction of a new substitute with a view to bringing about a total prohibition of the hazardous substance in question; and

(v) any other factor as may be considered by the Central Government to be relevant to the protection of environment.

(2) While prohibiting or restricting the handling of hazardous substances in an area including their imports and exports the Central Government shall follow the procedure hereinafter laid down:—

(i) Whenever it appears to the Central Government that it is expedient to impose prohibition or restriction on the handling of hazardous substances in an area, it may, by notification in the Official Gazette and in such other manner as the Central Government may deem necessary from time to time, give notice of its intention to do so.

(ii) Every notification under clause (i) shall give a brief description of the hazardous substances and the geographical region or the area to which such notification pertains and also specify the reasons for the imposition of prohibition or restriction on the handling of such hazardous substances in that region or area.

(iii) Any person interested in filing an objection against the imposition of prohibition or restrictions on the handling of hazardous substances as notified under clause (i) may do so in writing to the Central Government within sixty days from the date of publication of the notification in the Official Gazette.

(iv) The Central Government shall within a period of ninety days from the date of publication of the notification in the Official Gazette consider all the objections received against such notification and may impose prohibition or restrictions on the handling of hazardous substances in a region or an area”.

[No. 1-48/86-PL/HSMD]

DR. G. SUNDARAM, Jt. Secy.

Principal rules published vide S.O. No. 844(E) dt. 19th Nov., 1986. Amending rules published vide S.O. 82(E) dt. 16th Feb., 87; S.O. 393(E) dt. 16th April, 1987; S.O. 443(E) dt. 28th Apr., 1987; S.O. 64(E) dt. 18th Jan., 1988, GSR 919(E) dt. 12th Sept., 1988 and S.O. 8(E) dt. 3rd Jan. 1989.

## Notification

*New Delhi, the 31st October, 1989*

**PROHIBITION ON THE USE OF BENZIDINE-BASED DYES AND ITS SALTS**

S.O. 881(E).—In exercise of the powers conferred by clause (d) of sub-section (2) of section 6 of the Environment (Protection) Act, 1986 (29 of 1986), read with rule 13 of the Environment (Protection) Rules, 1986, the Central Government hereby notifies the prohibition and restriction on the use of benzidine-based dyestuffs in the dying and colour processing industries.

The use of Benzidine-based Dyes and Dye Intermediates.

1. Application.—This notification shall apply in respect of the prohibited substances as defined in the Environment (Protection) Rules, 1986, handled and the process incidental thereto in the course of which these substances are formed or carried on.

2. Prohibited substances.—For the purpose of this notification, the following chemical substances shall be classified as "prohibited substances" except when these substances are present or formed as by-product of a chemical reaction in a total concentration not exceeding one per cent:—

- (i) benzidine and its salts; and
- (ii) any substance containing any of these compounds.

3. Brief description.—Benzidine and Benzidine hydrochloride are important intermediates for the manufacture of dyes. Benzidine is white or slightly reddish crystalline powder with a melting point 115°C to 120°C when slightly heated. It darkens on exposure to air and light. These are produced by the reduction of nitrobenzidine with zinc and sodium hydroxide. The resulted hydrobenzidine is heated with the acid and its compounds have two phenols with two amino groups attached to them. These are also known as byphenyldiamine or diaminodiphenyl. Benzidine-based commercial dyes include direct orange (1), direct red (1), direct red (13), direct red (28), direct blue (2), direct blue, direct brown (2), direct brown (95), direct black (38) and acid red (85).

4. Dyes and dye-intermediates.—All dyes and dye-intermediates containing benzidine and its derivatives shall be prohibited for "handling". The use of benzidine-based dyes also called as benzidine-azo dyes shall be required to be discontinued within three years from the time of issue of this notification.

5. Extension.—The prohibition on the handling of benzidine-based dyes is applicable to whole of India.

6. Filing of objections.—Any person interested in filing an objection against the imposition of prohibition or restrictions on the handling of hazardous substances as notified may do so in writing to the Joint Secretary, Ministry of Environment and Forests, Paryavaran Bhavan,

Central Government Office Complex Lodi Road, New Delhi-110003, within sixty days from the date of publication of this notification in the Official Gazette.

[No. 1-48/86-PL/HSMD]

DR. G. SUNDARAM, Jt. Secy.

## Notification

*New Delhi, the 27th November, 1989*

S.O. 966(E).—In exercise of the powers conferred by Sections 6, 8 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules, namely:—

1. *Short title and commencement.*—(1) These rules may be called the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.
- (2) They shall come into force on the date of their publication in the Official Gazette.
2. *Definitions.*—In these rules, unless the context otherwise requires,—
  - (a) "Act" means the Environment (Protection) Act, 1986 (29 of 1986);
  - (b) "Authority" means an authority mentioned in Column 2 of Schedule 5;
  - (c) "export" with its grammatical variations and cognate expression, means taking out of India to a place outside India;
  - (d) "exporter" means any person under the jurisdiction of the exporting country and includes the exporting country, who exports hazardous chemical;
  - (e) "hazardous chemical" means,—
    - (i) any chemical which satisfies any of the criteria laid down in Part I of Schedule I and is listed in Column 2 of Part II of this Schedule;
    - (ii) any chemical listed in Column 2 of Schedule 2;
    - (iii) any chemical listed in Column 2 of Schedule 3;
  - (f) "import", with its grammatical variations and cognate expression, means bringing into India from a place outside India;
  - (g) "importer" means an occupier or any person who imports hazardous chemicals;
  - (h) "industrial activity" means,—
    - (i) an operation or process carried out in an industrial installation referred to in Schedule 4 involving or likely to involve one or more hazardous chemicals and includes on-site storage or on-site transport which is associated with that operation or process, as the case may be; or
    - (ii) isolated storage; or
    - (iii) pipeline;

- (i) "isolated storage" means storage of a hazardous chemical, other than storage associated with an installation on the same site specified in Schedule 4 where that storage involves atleast the quantities of that chemical set out in Schedule 2;
- (j) "major accident" means an occurrence including any particular major emission, fire or explosion involving one or more hazardous chemicals and resulting from uncontrolled developments in the course of an industrial activity or due to natural events leading to serious effects both immediate or delayed, inside or outside the installation likely to cause substantial loss of life and property including adverse effects on the environments;
- (k) "pipeline" means a pipe (together with any apparatus and works associated therewith) or system of pipes (together with any apparatus and works associated therewith) for the conveyance of a hazardous chemical other than a flammable gas as set out in Column 2 of Part II of Schedule 3 at a pressure of less than 8 bars absolute; the pipeline also includes interstate pipelines;

- (l) "Schedule" means Schedule appended to these rules;
- (m) "site" means any location where hazardous chemicals are manufactured or processed, stored, handled, used, disposed of and includes the whole of an area under the control of an occupier and includes pier, jetty or similar structure whether floating or not;
- (n) "Threshold quantity" means,—

- (i) in the case of a hazardous chemical specified in Column 2 of Schedule 2, the quantity of that chemical specified in the corresponding entry in Columns 3 & 4;
- (ii) in the case of a hazardous chemical specified in Column 2 of Part I of Schedule 3, the quantity of that chemical specified in the corresponding entry in Columns 3 & 4 of that part;
- (iii) in the case of substances of a class specified in Column 2 of Part II of Schedule 3, the total quantity of all substances of that class specified in the corresponding entry in Columns 3 & 4 of that part.

**3. Duties of authorities.** — Subject to the other provisions of these rules, the authority shall perform duties as specified in Column 3 of Schedule 5.

**4. General responsibility of the occupier during industrial activity.** — (1) This rule shall apply to,—

- (a) an industrial activity in which a hazardous chemical, which satisfies any of the criteria laid down in Part I of Schedule I and is listed in Column 2 of Part II of this Schedule is or may be involved; and

- (b) isolated storage in which there is involved a threshold quantity of a hazardous chemical listed in Schedule 2 in Column 2 which is equal to or more than the threshold quantity specified in the Schedule for that chemical in Column 3 thereof.

(2) An occupier who has control of an industrial activity in terms of sub-rule (1) shall provide evidence to show that he has,—

- (a) identified the major accident hazards; and
- (b) taken adequate steps to—
  - (i) prevent such major accidents and to limit their consequences to persons and the environment;
  - (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety.

**5. Notification of Major accident.** — (1) Where a major accident occurs on a site, the occupier shall forthwith notify the concerned authority as identified in Schedule 5 of that accident, and furnish thereafter to the concerned authority a report relating to the accidents in instalments, if necessary, in Schedule 6.

(2) The concerned authority shall on receipt of the report in accordance with sub-rule 1 of this rule, shall undertake a full analysis of the major accident and send the requisite information to the Ministry of Environment and Forests through appropriate channel.

(3) Where an occupier has notified a major accident to the concerned authority under respective legislation, he shall be deemed to have complied with the requirements as per sub-rule 1 of this rule.

**6. Industrial activity to which rules 7 to 15 apply.** —

(1) Rules 7 to 15 shall apply to,—

- (a) an industrial activity in which there is involved a quantity of a hazardous chemical listed in Column 2 of Schedule 3 which is equal to or more than the quantity specified in the entry for that chemical in Columns 3 & 4 (Rules 10-12 only for Column 4) and
- (b) isolated storage in which there is involved a quantity of a hazardous chemical listed in Column 2 of Schedule 2 which is equal to or more than the quantity specified in the entry for that chemical in Column 4.

(2) For the purposes of rules 7 to 15,—

- (a) "new industrial activity" means an industrial activity which—
  - (i) commences after the date of coming into operation of these rules; or
  - (ii) if commenced before that date, is an industrial activity in which a modification has been made which is likely to cover major accident

hazards, and that activity shall be deemed to have commenced on the date on which the modification was made;

- (b) an "existing industrial activity" means an industrial activity which is not a new industrial activity.

**7. Notification of sites.**—(1) An occupier shall not undertake any industrial activity unless he has submitted a written report to the concerned authority containing the particulars specified in Schedule 7 at least 3 months before commencing that activity or before such shorter time as the concerned authority may agree and for the purposes of this paragraph, an activity in which subsequently there is or is liable to be a threshold quantity or more of an additional hazardous chemical shall be deemed to be a different activity and shall be notified accordingly.

(2) No report under sub-rule (1) need to be submitted by the occupier if he submits a report under rule 10(1).

**8. Updating of the site notification following changes in the threshold quantity.**—Where an activity has been reported in accordance with rule 7(1) and the occupier makes a change in it (including an increase or decrease in the maximum threshold quantity of a hazardous chemical to which this rule applies which is or is liable to be at the site or in the pipeline or at the cessation of the activity) which affects the particulars specified in that report or any subsequent report made under this rule. The occupier shall forthwith furnish a further report to the concerned authority.

**9. Transitional provisions.**—Where,—

- (a) at the date of coming into operation of these rules, an occupier is in control of an existing industrial activity which is required to be reported under rule 7(1); or
- (b) within 6 months after that date an occupier commences any such new industrial activity;

it shall be a sufficient compliance with that rule if he reports to the concerned authority as per the particulars in Schedule 7 within 3 months after the date of coming into operation of these rules or within such longer time as the concerned authority may agree in writing.

**10. Safety reports.**—(1) Subject to the following paragraphs of this rule, an occupier shall not undertake any industrial activity to which this rule applies, unless he has prepared a safety report on that industrial activity containing the information specified in Schedule 8 and has sent a copy of that report to that concerned authority at least ninety days before commencing that activity.

(2) In the case of a new industrial activity which an occupier commences or by virtue of sub-rule (2) (a) (ii) of rule 6 is deemed to commence, within 6 months after coming into operation of these rules, it shall be a sufficient compliance with sub-rule (1) of this rule if the occupier sends to the concerned

authority a copy of the report required in accordance with that sub-rule within ninety days after the date of coming into operation of these rules.

(3) In the case of an existing industrial activity, until five years from the date of coming into operation of these rules, it shall be a sufficient compliance with sub-rule (1) of this rule if the occupier on or before ninety days from the date of the coming into operation of these rules sends to the concerned authority the information specified in Schedule 7 relating to that activity.

**11. Updating of reports under Rule 10.**—(1) Where an occupier has made a safety report in accordance with sub-rule (1) of rule 10 he shall not make any modification to the industrial activity to which that safety report relates which could materially affect the particulars in that report, unless he has made a further report to take account of those modifications and has sent a copy of that report to the concerned authority at least 90 days before making those modifications.

(2) Where an occupier has made a report in accordance with rule 10 and sub-rule (1) of this rule and that industrial activity is continuing, the occupier shall within three years of the date of the last such report, make a further report which shall have regard in particular to new technical knowledge which has affected the particulars in the previous report relating to safety and hazard assessment, and shall within 30 days or in such longer time as the concerned authority may agree in writing, send a copy of the report to the concerned authority.

**12. Requirements for further information to be sent to the authority.**—(1) Where, in accordance with rule 10, an occupier has sent a safety report relating to an industrial activity to the concerned authority, the concerned authority may, by a notice served on the occupier, require him to provide such additional information as is specified in the notice and the occupier shall send that information to the concerned authority within such time as is specified in the notice or within such extended time as the authority may subsequently specify.

**13. Preparation of on-site emergency plan by the occupier.**—(1) An occupier shall prepare and keep up-to-date an on-site emergency plan detailing how major accidents will be dealt with on the site on which the industrial activity is carried on and that plan shall include the name of the person who is responsible for safety on the site and the names of those who are authorised to take action in accordance with the plan in case of an emergency.

(2) The occupier shall ensure that the emergency plan prepared in accordance with sub-rule (1), takes into account any modification made in the industrial activity and that every person on the site who is affected by the plan is informed of its relevant provisions.

(3) The occupier shall prepare the emergency plan required under sub-rule (1),—

- (a) in the case of a new industrial activity, before that activity is commenced;
- (b) in the case of an existing industrial activity within 90 days of coming into operation of these rules.

**14. Preparation of off-site emergency plans by the authority.** — (1) It shall be the duty of the concerned authority as identified in Column 2 of Schedule 5 to prepare and keep up-to-date an adequate off-site emergency plan detailing how emergencies relating to a possible major accident on that site will be dealt with and in preparing that plan the concerned authority shall consult the occupier, and such other persons as it may deem necessary.

(2) For the purpose of enabling the concerned authority to prepare the emergency plan required under sub-rule (1), the occupier shall provide the concerned authority with such information relating to the industrial activity under his control as the concerned authority may require, including the nature, extent and likely effects off-site of possible major accidents and the authority shall provide the occupier with any information from the off-site emergency plan which relates to his duties under rule 13.

(3) The concerned authority shall prepare its emergency plan required under sub-rule (1) —

- (a) in the case of a new industrial activity, before that activity is commenced;
- (b) in the case of an existing industrial activity, within six months of coming into operation of these rules.

**15. Information to be given to persons liable to be affected by a major accident.** — (1) The occupier shall take appropriate steps to inform persons outside the site either directly or through District Emergency Authority who are likely to be in an area which may be affected by a major accident about —

- (a) the nature of the major accident hazard; and
- (b) the safety measures and the 'Dos' and 'Donts' which should be adopted in the event of a major accident.

(2) The occupier shall take the steps required under sub-rule (1) to inform persons about an industrial activity, before that activity is commenced, except, in the case of an existing industrial activity in which case the occupier shall comply with the requirements of sub-rule (1) within 90 days of coming into operation of these rules.

**16. Disclosures of information.** — (1) Where for the purpose of evaluating information notified under rule 5 or 7 to 15, the concerned authority discloses that information to some other person, that other person shall not use that information for any purpose except for the purpose of the concerned authority disclosing it, and before disclosing the information the concerned authority shall inform that other person of his obligations under this paragraph.

**17. Collection, Development and Dissemination of Information.** — (1) This rule shall apply to an industrial activity in which a hazardous chemical which satisfies any of the criteria laid down in part I of Schedule 1 and is listed in Column 2 of Part II of this Schedule is or may be involved.

(2) An occupier, who has control of an industrial activity in term of sub-rule (1) of this rule, shall arrange to obtain or develop information in the form of safety data sheet as specified in Schedule 9. The information shall be accessible upon request for reference.

(3) The occupier while obtaining or developing a safety data sheet as specified in Schedule 9 in respect of a hazardous chemical handled by him shall ensure that the information is recorded accurately and reflects the scientific evidence used in making the hazard determination. In case, any significant information regarding hazard of a chemical is available, it shall be added to the material safety data sheet as specified in Schedule 9 as soon as practicable.

(4) Every container of a hazardous chemical shall be clearly labelled or marked to identify,—

- (a) the contents of the container;
- (b) the name and address of the manufacturer or importer of the hazardous chemical;
- (c) the physical, chemical and toxicological datas per the criteria given at Part I of Schedule 1.

(5) In terms of sub-rule 4 of this rule where it is impractical to label a chemical in view of the size of the container or the nature of the package, provision should be made for other effective means like tagging or accompanying documents.

**18. Import of hazardous chemicals.** — (1) This rule shall apply to a chemical which satisfies any of the criteria laid down in Part I of Schedule 1 and is listed in Column 2 of Part II of this Schedule.

(2) Any person responsible for importing hazardous chemicals in India shall provide at the time of import or within thirty days from the date of import to the concerned authorities as identified in Column 2 of Schedule 5 the information pertaining to —

- (i) the name and address of the person receiving the consignment in India;
- (ii) the port of entry in India;
- (iii) mode of transport from the exporting country to India;
- (iv) the quantity of chemical(s) being imported; and
- (v) complete product safety information.

(3) If the concerned authority at the State is satisfied that the chemical being imported is likely to cause major accident, it may direct the importer to take such steps including stoppage of such imports as the concerned authority at the State may deem it appropriate.

(4) The concerned authority at the State shall simultaneously inform the concerned Port Authority to take appropriate steps regarding safe handling and storage of hazardous chemicals while off-loading the consignment within the port premises.

(5) Any person importing hazardous chemicals shall maintain the records of the hazardous chemicals imported as specified in Schedule 10 and the

records so maintained shall be open for inspection by the concerned authority at the State or the Ministry of Environment and Forests or any officer appointed by them in this behalf.

(6) The importer of the hazardous chemical or a person working on his behalf shall ensure that transport of hazardous chemicals from port of entry to the ultimate destination is in accordance with the Central Motor Vehicles Rules, 1989 framed under the provisions of the Motor Vehicles Act, 1988.

**19. Improvement notices.**— (1) If the concerned authority is of the opinion that a person has contravened the provisions of these rules, the concerned authority shall serve on him a notice (in this para referred to as "an improvement notice") requiring that person to remedy the contravention or, as the case may be, the matters occasioning it within such period as may be specified in the notice.

(2) A notice served under sub-rule (1) shall clearly specify the measures to be taken by the occupier in remedying said contraventions.

**20. Power of the Central Government to modify the Schedules.**— The Central Government may, at any time, by notification in the Official Gazette, make suitable changes in the Schedules.

#### SCHEDULE I

[See rule 2(e) (i), 4(1) (a), 4(2) (i), 17 and 18.]

##### Indicative Criteria and List of Chemicals

##### PART 1

###### (a) Toxic Chemicals:

Chemicals having the following values of acute toxicity and which, owing to their physical and chemical properties, are capable of producing major accident hazards.

Sl. No.	Degree of Toxicity	Medium lethal dose by the oral route (oral toxicity)	Medium let-hal dose by the dermal route (dermal toxicity)	Medium let-hal concentration by inhalation route (four hours)
1.	Extremely toxic	1 — 50 (mg/kg body weight of test animals)	1 — 200 (mg/kg body weight of test animals)	0.1 — 0.5 LC 50 (mg/1 inhalation in test animals)
2.	Highly toxic	51 — 500 (mg/kg body weight of test animals)	201 — 2000 (mg/kg body weight of test animals)	0.5 — 2.0 LC 50 (mg/1 inhalation in test animals)

###### (b) Flammable chemicals:

- (a) flammable gases: chemicals which in the gaseous state at normal pressure and mixed with air become flammable and the boiling point of which at normal pressure is 20°C or below;
- (ii) highly flammable liquids: chemicals which have a flash point lower than 23°C and the boiling point of which at normal pressure is above 20°C;

(iii) flammable liquids: chemicals which have a flash point lower than 65°C and which remain liquids under pressure, where particular processing conditions, such as high pressure and high temperature, may create major accident hazards.

###### (c) Explosives:

Chemicals which may explode under the effect of flame, heat or photo-chemical conditions or which are more sensitive to shocks or friction than dinitrobenzene.

#### PART II

##### List of Hazardous and Toxic Chemicals

Sl. No.	Name of the Chemical
1	2
1.	Acetone
2.	Acetone Cyanohydrine
3.	Acetyl Chloride
4.	Acetylene (Ethyne)
5.	Acrolein (2-Propenal)
6.	Acrylonitrile
7.	Aldicarb
8.	Aldrin
9.	Alkyl Phthalate
10.	Allyl Alcohol
11.	Allylamine
12.	Alpha Naphthyl Thiourea (Antu)
13.	Aminodiphenyl - 4
14.	Aminophenol - 2
15.	Amiton
16.	Ammonia
17.	Ammonium Nitrate
18.	Ammonium Nitrates in fertilizers
19.	Ammonium Sulfamate
20.	Anabasine
21.	Aniline
22.	Anisidine-p
23.	Antimony and Compounds
24.	Antimony Hydride (Stibine)
25.	Arsenic Hydride (Arsine)
26.	Arsenic Pentoxide, (Arsenic) (v) Acide and Salts
27.	Arsenic Trioxide, Arsenious (iii) Acids and Salts
28.	Asbestos
29.	Azinphos-Ethyl
30.	Azinphos-Methyl
31.	Barium Azide
32.	Benzene
33.	Benzidine
34.	Benzidine Salts
35.	Benzoquinone
36.	Benzoyl Chloride
37.	Benzoyl Peroxide
38.	Benzyl Chloride
39.	Benzyl Cyanide
40.	Beryllium (Powders, Compounds)
41.	Biphenyl
42.	Bis (2-Chloromethyl) Ketone
43.	Bis (2, 4, 6-Trinitrophenyl) Amine
44.	Bis (2-Chloroethyl) Sulphide
45.	Bis (Chloromethyl) Ether
46.	Bis (tert-Butylperoxy) Butane, 2, 2
47.	Bis (tert-Butylperoxy) Cyclohexane, 1, 1

48. Bis - , 2 TRIBROMOPHENOXY-Ethane  
 49. Bisphenol  
 50. Boron and Compounds  
 51. Bromine  
 52. Bromine Pentafluoride  
 53. Bromoform  
 54. Butadiene-1,3  
 55. Butane  
 56. Butanethiol  
 57. Butanone-2  
 58. Butoxy Ethanol  
 59. Butyl Glycidal Ether  
 60. Butyl Peroxyacetate, tert  
 61. Butyl Peroxyisobutyrate, tert  
 62. Butyl Peroxyisopropyl Carbonate tert  
 63. Butyl Peroxymaleate, tert  
 64. Butyl Peroxypivalate,-tert  
 65. Butyl Vinyl Ether  
 66. Butyl-n-Mercaptan  
 67. Butylamine  
 68. C 9-Aromatic Hydrocarbon Fraction  
 69. Cadmium and Compounds  
 70. Cadmium Oxide (fumes)  
 71. Calcium Cyanide  
 72. Captan  
 73. Captofol  
 74. Carbaryl (Sevin)  
 75. Carbofuran  
 76. Carbon Disulphide  
 77. Carbon Monoxide  
 78. Carbon Tetrachloride  
 79. Carbophenothon  
 80. Cellulose Nitrate  
 81. Chlorates (used in explosives)  
 82. Chlordane  
 83. Chlorfenvinphos  
 84. Chlorinated Benzenes  
 85. Chlorine  
 86. Chlorine Di Oxide  
 87. Chlorine Oxide  
 88. Chlorine Trifluoride  
 89. Chlormequat Chloride  
 90. Chloroacetalchloride  
 91. Chloroacetaldehyde  
 92. Chloroaniline,-2  
 93. Chloroaniline,-4  
 94. Chloropenzene  
 95. Chlorodiphenyl  
 96. Chloroepoxypropane  
 97. Chloroethanol  
 98. Chloroethyl Chloroformate  
 99. Chlorofluorocarbons  
 100. Chloroform  
 101. Chloroformyl,-4, Morpholine  
 102. Chloromethane  
 103. Chloromethyl Ether  
 104. Chloromethyl Methyl Ether  
 105. Chloronitrobenzene  
 106. Chloroprene  
 107. Chlorosulphonic Acid  
 108. Chlorotrinitrobenzene  
 109. Chloroxuron  
 110. Chromium and Compounds  
 111. Cobalt and Compounds  
 112. Copper and Compounds  
 113. Coumafuryl  
 114. Coumaphos  
 115. Coumatetralyl  
 116. Cresols  
 117. Crimidine  
 118. Cumene  
 119. Cyanophos  
 120. Cyanothoate  
 121. Cyanuric Fluoride  
 122. Cyclohexane  
 123. Cyclohexanol  
 124. Cyclohexanone  
 125. Cycloheximide  
 126. Cyclopentadiene  
 127. Cyclopentane  
 128. Cyclotetramethylenetrinitramine  
 129. Cyclotrimethylene Trinitramine  
 130. DDT  
 131. Decabromodiphenyl Oxide  
 132. Demeton  
 133. Di-Isobutyl Peroxide  
 134. Di-Propyl Peroxidicarbonate  
 135. Di-sec-Butyl Peroxidicarbonate  
 136. Dialifos  
 137. Diazodinitrophenol  
 138. Diazomethane  
 139. Dibenzyl Peroxidicarbonate  
 140. Dichloroacetylene  
 141. Dichlorobenzene-o  
 142. Dichlorobenzene-p  
 143. Dichloroethane  
 144. Dichloroethyl Ether  
 145. Dichlorophenol, 2, 4  
 146. Dichlorophenol, -2, 6  
 147. Dichlorophenoxy Acetic Acid, -2, 4 (2, 4-D)  
 148. Dichloropropane,-1, 2  
 149. Dichlorosalicylic Acid, -3, 5  
 150. Dichlorvos (DDVP)  
 151. Dicrotophos  
 152. Dieldrin  
 153. Diepoxybutane  
 154. Diethyl Peroxidicarbonate  
 155. Diethylene Glycol Dintrate  
 156. Diethylene Triamine  
 157. Diethyleneglycol Butyl Ether/Diethylenegicol Butyl Acetate  
 158. Diethylenetriamine (DETA)  
 159. Diglycidyl Ether  
 160. Dihydroperoxypropane, -2, 2  
 161. Diisobutryl Peroxide  
 162. Dimefox  
 163. Dimethoate  
 164. Dimetyl Phosphoramidocyanidic Acid  
 165. Dimethyl Phthalate  
 166. Dimethylcarbonyl  
 167. Dimethylnitrosamine  
 168. Dinitrophenol, Salts  
 169. Dinitrotoluene  
 170. Dintro-o-Cresol  
 171. Dioxane  
 172. Dioxathion  
 173. Dioxolane  
 174. Diphascinone  
 175. Diphosphoramido Octamethyl  
 176. Dipropylene Glycolmethylether  
 177. Disulfoton  
 178. Endosulfan  
 179. Endrin  
 180. Epichlorohydrine  
 181. EPN  
 182. Epoxyp propane, 1, 2  
 183. Ethion  
 184. Ethyl Carbamate  
 185. Ethyl Ether  
 186. Ethyl Hexanol, -2  
 187. Ethyl Mercaptan

188. Ethyl Methacrylate  
 189. Ethyl Nitrate  
 190. Ethylamine  
 191. Ethylene  
 192. Ethylene Chlorohydrine  
 193. Ethylene Diamine  
 194. Ethylene Dibromide  
 195. Ethylene Dichloride  
 196. Ethylene Glycol Dinitrate  
 197. Ethylene Oxide  
 198. Ethyleneimine  
 199. Ethylthiocyanate  
 200. Fensulphothion  
 201. Fluenetil  
 202. Fluoro-, -4, -2-Hydroxybutyric Acid and Salts, Esters, Amides  
 203. Fluoroacetic Acid and Salts, Esters, Amides  
 204. Fluorobutyric Acid, -4, and Salts, Esters, Amides  
 205. Fluorocrotonic Acid, -4, and Salts, Esters, Amides  
 206. Formaldehyde  
 207. Glyconitrile (Hydroxyacetonitrile)  
 208. Guanyl, -1, -4-Nitrosaminoguanyl-1-Tetrazene  
 209. Heptachlor  
 210. Haxachlоро Cyclopentadiene  
 211. Hexachlorocyclohexane  
 212. Hexachlorocy cloamethane  
 213. Hexachlorodibenzo-p-Dioxin, -1, 2, 3, 7, 8, 9  
 214. Hexafluoropropene  
 215. Hexamethylphosphoramide  
 216. Hexamethyl, -3, 3, 6, 9, 9, -1, 2, 4, 5-Texproxa-cyclononane  
 217. Hexamethylenediamine  
 218. Hexane  
 219. Hexanitrostlbene, -2, 2, 4, 4, 6, 6  
 220. Hexavalent Chromium  
 221. Hydrazine  
 222. Hydrazine Nitrate  
 223. Hydrochloric Acid  
 224. Hydrogen  
 225. Hydrogen Bromide (Hydrobromic Acid)  
 226. Hydrogen Chloride (Liquified Gas)  
 227. Hydrogen Cyanide  
 228. Hydrogen Fluoride  
 229. Hydrogen Selenide  
 230. Hydrogen Sulphide  
 231. Hydroquinone  
 232. Iodine  
 233. Isobenzan  
 234. Isodrin  
 235. Isophorone Diisocyanate  
 236. Isopropyl Ether  
 237. Juglone (5-Hydroxynaphthalene-1, 4-Dione)  
 238. Lead (inorganic fumes & dusts)  
 239. Lead 2, 4, 6-Trinitroresorcinoxide (Lead Styphnate)  
 240. Lead Azide  
 241. Leptophos  
 242. Lindane  
 243. Liquified Petroleum Gas (LPG)  
 244. Maleic Anhydride  
 245. Manganese & Compounds  
 246. Mercapto Benzothiazole  
 247. Mercury Alkyl  
 248. Mercury Fulminate  
 249. Mercury Methyl  
 250. Methacrylic Anhydride  
 251. Methacrylonitrile  
 252. Methacryloyl Chloride  
 253. Methamidophos  
 254. Methanesulphonyl Fluoride  
 255. Methanethiol  
 256. Methoxy Ethanol (2-Methyl Cellosolve)  
 257. Methoxyethylmecuric Acetate  
 258. Methyl Acrylate  
 259. Methyl Alcohol  
 260. Methyl Amylketone  
 261. Methyl Bromide (Bromomethane)  
 262. Methyl Chloride  
 263. Methyl Choloroform  
 264. Methyl Cyclohexene  
 265. Methyl Ethyl Ketone Peroxide  
 266. Methyl Hydrazine  
 267. Methyl Isobutyl Ketone  
 268. Methyl Isobutyl Ketone Peroxide  
 269. Methyl Isocyanate  
 270. Methyl Isothiocyanate  
 271. Methyl Mercaptan  
 272. Methyl Methacrylate  
 273. Methyl Parathion  
 274. Methyl Phosphonic Dichloride  
 275. Methyl-N, 2, 4, 6-Tetranitroaniline  
 276. Methylene Chloride  
 277. Methylenebis,-4, 4, (2-Chloroaniline)  
 278. Methyltrichlorosilane  
 279. Mevinphos  
 280. Molybdenum & Compounds  
 281. N-Methyl-N, 2, 4, 6-N-Tetranitroaniline  
 282. Naphtha (Coal Tar)  
 283. Naphthylamine, 2  
 284. Nickel & Compounds  
 285. Nickel Tetracarbonyl  
 286. Nitroaniline-O  
 287. Nitroaniline-P  
 288. Nitrobenzene  
 289. Nitrochlorobenzene-P  
 290. Nitrocyclohexane  
 291. Nitroethane  
 292. Nitrogen Dioxide  
 293. Nitrogen Oxides  
 294. Nitrogen Trifluoride  
 295. Nitroglycerine  
 296. Nitrophenol-P  
 297. Nitropropane-1  
 298. Nitropropane-2  
 299. Nitrosodimethylamine  
 300. Nitrotoluene  
 301. Octabromophenyl Oxide  
 302. Oleum  
 303. Oleylamine  
 304. OO-Diethyl S-Ehylsulphonylmethyl  
 305. Oo-Diethyl S-Ethylsulphonylmethyl Phosphorothioate  
 306. OO-Diethyl S-Ethylthiomethyl Phosphorothioate  
 307. OO-Diethyl S-Isopropyltniomethyl Phosphorodithioate  
 308. OO-Diethyl S-Propylthiomethyl Phosphorodithioate

309. Oxyamyl  
 310. Oxydisulfoton  
 311. Oxygen (Liquid)  
 312. Oxygen Difluoride  
 313. Ozone  
 314. Paroxon (Diethyl 4-Nitrophenyl Phosphate)  
 315. Paraquat  
 316. Parathion  
 317. Parathion Methyl  
 318. Paris green (Bis Aceto Hexametaarsenito Tetracopper)  
 319. Pentaborane  
 320. Pentabromodiphenyl Oxide  
 321. Pentabromophenol  
 322. Pentachloro Naphthalene  
 323. Pentachloroethane  
 324. Pentachlorophenol  
 325. Pentaerythritol Tetranitrate  
 326. Pentane  
 327. Peracetic Acid  
 328. Perchloroethylene  
 329. Perchloromethyl Mercaptan  
 330. Petanone, 2, 4-Methyl  
 331. Phenol  
 332. Phenyl Glycidal Ether  
 333. Phenylene p-Diamine  
 334. Phenylmercury Acetate  
 335. Phorate  
 336. Phosacetim  
 337. Phosalone  
 338. Phosfolan  
 339. Phosgene (Carbonyl Chloride)  
 340. Phosmet  
 341. Phosphamidon  
 342. Phosphine (Hydrogen Phosphide)  
 343. Phosphoric Acid and Esters  
 344. Phosphoric Acid, Bromoethyl Bromo (2, 2-Dimethylpropyl) Bromoethyl Ester  
 345. Phosphoric Acid, Bromoethyl Bromo (2, 2-Dimethylpropyl) Chloroethyl Ester  
 346. Bosphoric Acid. Chloroethyl Bromo (2, 2-Dimethoxypropyl) Chloroethyl ester  
 347. Phosphorous & Compounds  
 348. Phostalan  
 349. Picric Acid (2, 4, 6-Trinitrophenol)  
 350. Polybrominated Biphenyls  
 351. Potassium Arsenite  
 352. Potassium Chlorate  
 353. Promurit (1-(3, 4-Dichlorophenyl)-3-Triazene-thiocarboxamide)  
 354. Propaneshultone-1, 3  
 355. Propen-1, 2-Chloro-1, 3-Diol-Diacetate  
 356. Propylene Dichloride  
 357. Propylene Oxide  
 358. Propyleneimine  
 359. Pyrazoxon  
 360. Selenium Hexafluoride  
 361. Semicarbazide Hydrochloride  
 362. Sodium Arsenite  
 363. Sodium Azide  
 364. Sodium Chlorate  
 365. Sodium Cyanide  
 366. Sodium Picramate  
 367. Sodium Selenite  
 368. Styrene, 1, 1, 2, 2-Tetrachloroethane  
 369. Sulfotep  
 370. Sulphur Dichloride  
 371. Sulphur Dioxide  
 372. Sulphur Trioxide  
 373. Sulphuric Acid  
 374. Sulphoxide, 3-Chloropropyl octyl  
 375. Tellurium  
 376. Tellurium Hexafluoride  
 377. Tepp  
 378. Terbufos  
 379. Teträpromobisphenol-A  
 380. Tetrachloro, 2, 2, 5, 6, 2, 5-Cyclohexadiene-1, 4-Dione  
 381. Tetrachlorodibenz-p-Dioxin, 2, 3, 7, 8 (TCDD)  
 382. Tetraethyl Lead  
 383. Tetrafluoroethane  
 384. Tetramethylenedisulphotetramine  
 385. Tetramethyl Lead  
 386. Tertanitromethane  
 387. Thallium & Compounds  
 388. Thionazin  
 389. Thionyl Chloride  
 390. Tirpate  
 391. Toluene  
 392. Toluene-2, 4-Diisocyanate  
 393. Toluidine-O  
 394. Toluene 2, 6-Diisocyanate  
 395. Trans-1, 4-Chlorobutene  
 396. Tri, -1 (Cyclohexyl) Stannyl-1H-1, 2, 4-Trazole  
 397. Triamino, -1, 3, 5, 2, 4, 6-Trinitrozenzene  
 398. Tribromophenol, 2, 4, 6  
 399. Trichloro Acetyl Chloride  
 400. Trichloro Ethane  
 401. Trichloro Naphthalene  
 402. Trichloro (chloromethyl) Silane  
 403. Trichlorodichlorophenylsilane  
 404. Trichloroethane, 1, 1, 1  
 405. Trichloroethyl Silane  
 406. Trichloroethylene  
 407. Trichloromethanesulphenyl Chloride  
 408. Trichlorophenol, 2, 2, 6  
 409. Trichlorophenol, 2, 4, 5  
 410. Triethylamine  
 411. Triethylenemelamine  
 412. Trimethyl Chlorosilane  
 413. Trimethylolpropane Phosphite  
 414. Trinitroaniline  
 415. Trinitroanisole, 2, 24, 6  
 416. Trinitrobenzene  
 417. Trinitrobenzoic Acid  
 418. Trinitrocresol  
 419. Trinitrophenetole, 2, 4, 6  
 420. Trinitroresorcinol, 2, 4, 6 (Styphnic Acid)  
 421. Trinitrotoluene  
 422. Triorthocresyl Phosphate  
 423. Triphenyltin Chloride  
 424. Turpentine  
 425. Uranium & Compounds  
 426. Vanadium & Compounds  
 427. Vinyl Chloride  
 428. Vinyl Fluoride  
 429. Vinyl Toluene  
 430. Warfarin  
 431. Xylene  
 432. Xylidine  
 433. Zinc & Compounds  
 434. Zirconium & Compounds

## SCHEDULE 2

[See rule 2(e)(ii), 4(1)(b), 4(2)(1) and 6(1)(b)]

Isolated Storage at Installations other than those covered by Schedule 4.

(a) The threshold quantities set out below relate to each installation or group of installations belonging to the same occupier where the distance between installations is not sufficient to avoid, in foreseeable circumstances, any aggravation of major accident hazards. These threshold quantities apply in any case to each group of installations belonging to the same occupier where the distance between the installations is less than 500 metres.

(b) For the purpose of determining the threshold quantity of a hazardous chemical at an isolated storage, account shall also be taken of any hazardous chemical which is:—

- (i) in that part of any pipeline under the control of the occupier having control of the site, which is within 500 metres of that site and connected to it;
- (ii) at any other site under the control of the same occupier any part of the boundary of which is within 500 metres of the said site; and
- (iii) in any vehicle, vessel, aircraft or hovercraft under the control of the same occupier which is used for storage purpose either at the site or within 500 metres of it;

but no account shall be taken of any hazardous chemical which is in a vehicle, vessel, aircraft or hovercraft used for transporting it.

Sl. No.	Chemicals	Threshold Quantities (tonnes)	
		For application of Rules 4, 5 and 7-9.	For application of Rules 10 to 15
1.	2.	3.	4.
1.	Acrylonitrile	350	5,000
2.	Ammonia	60	600
3.	Ammonium nitrate (a)	350	2,500
4.	Ammonium nitrate fertilizers (b)	1,250	10,000
5.	Chlorine	10	25
6.	Flammable gases as defined in Schedule I, paragraph (b)(i)	50	300
7.	Highly flammable liquids as defined in Schedule 1, paragraph (b)(ii)	10,000	10,0000
8.	Liquid oxygen	200	2,000
9.	Sodium chlorate	25	250
10.	Sulphur dioxide	20	500
11.	Sulphur trioxide	15	100

(a) This applies to ammonium nitrate and mixtures of ammonium nitrate where the nitrogen content derived from the ammonium nitrate is greater than 28 per cent by weight and to aqueous solutions of ammonium nitrate where the concentration of ammonium nitrate is greater than 90 per cent by weight.

(b) This applies to straight ammonium nitrate fertilizers and to compound fertilizers where the nitrogen content derived from the ammonium nitrate is greater than 28 per cent by weight (a compound-fertilizer contains ammonium nitrate together with phosphate and/or potash).

## SCHEDULE 3

[See rule 2(e)(iii), 5 and 6(1)(a)]

## List of Hazardous Chemicals for Application of Rules 5 and 7 to 15.

(a) The quantities set-out-below relate to each installation or group of installations belonging to the same occupier where the distance between the installations is not sufficient to avoid, in foreseeable circumstances, any aggravation of major-accident hazards. These quantities apply in any case to each group of installations belonging to the same occupier where the distance between the installations is less than 500 metres.

(b) For the purpose of determining the threshold quantity of a hazardous chemical in an industrial installation, account shall also be taken of any hazardous chemicals which is:—

- (i) in that part of any pipeline under the control of the occupier having control of the site, which is within 500 metres off that site and connected to it;

(ii) at any other site under the control of the same occupier any part the boundary of which is within 500 metres the said site; and (d) (i)(a), (ii)(a), (iii)(a) & also (d)

(iii) in any vehicle, vessel, aircraft or hovercraft under the control of the same occupier which is used for storage purpose either at the site or within 500 metres of it;

but no account shall be taken of any hazardous chemical which is in a vehicle, vessel, aircraft or hovercraft used for transporting it.

## PART I

## Named Chemicals

Sl. No.	Chemical	Threshold for application of Rules 5, 7-9 and 13-15	Quantity for application of Rules 10-12	CAS Number
		3.	4.	
1.	2.	3.	4.	5.
<b>GROUP 1-TOXIC SUBSTANCES</b>				
1.	Aldicarb	100 kg		116-06-3
2.	4-Aminodiphenyl	1 kg		96-67-1
3.	Amiton	1 kg		78-53-5
4.	Anabasine	100 kg		494-52-0
5.	Arsenic pentoxide, Arsenic (V) acid & salts	500 kg		
6.	Arsenic trioxide, Arsenious (III) acid & salts	100 kg		
7.	Arsine (Arsenic hydride)	10 kg		7784-42-1
8.	Azinphos-ethyl	100 kg		2642-71-9
9.	Azinphos-methyl	100 kg		86-50-0
10.	Bezidine	1 kg		92-87-5
11.	Bezidine salts	1 kg		
12.	Beryllium (powders compounds)	10 kg		
13.	Bis (2-chloroethyl) sulphide	1 kg		505-60-2
14.	Bis chloromethyl) ether	1 kg		542-88-1
15.	Carbofuran	100 kg		1563-68-2
16.	Carbophenothion	100 kg		786-19-6
17.	Chlorfenvinphos	100 kg		470-90-6
18.	4-(Chloroformyl) morpholine	1 kg		15159-40-7
19.	Chloromethyl methyl ether	1 kg		107-30-2
20.	Cobalt (metal, oxides, carbonates, sulphides, as powders)	1 t		
21.	Crimidine	100 kg		535-89-7
22.	Cyanthoate	100 kg		3734-95-0
23.	Cycloheximide	100 kg		66-81-9
24.	Demeton	100 kg		8065-48-3
25.	Dialifos	100 kg		10311-84-9
26.	OO-Diethyl S-ethylsulphinylmethyl phosphorothioate	100 kg		2588-06-8
27.	OO-Diethyl S-ethylsulphonylmethyl phosphorothioate	100 kg		2588-06-9
28.	OO-Diethyl S-ethylthiomethyl phosphorothioate	100 kg		2600-69-3
29.	OO-Diethyl S-isopropylthiomethyl phosphorothioate	100 kg		78-52-4
30.	OO-Diethyl S-propylthiomethyl phosphorothioate	100 kg		3309-68-0
31.	Dimefox	100 kg		115-26-4
32.	Dimethylcarbamoyl chloride	1 kg		79-44-7
33.	Dimethylnitrosamine	1 kg		62,75-9
34.	Dimethyl phosphoramidocyanide acid	1 t		63917-41-9
35.	Diphacinone	100 kg		82-66-6
36.	Disulfoton	100 kg		298-04-4
37.	EPN	100 kg		2104-64-5
38.	Ethion	100 kg		563-12-2
39.	Fensulfothion	100 kg		115-90-2
40.	Flunetil	1 kg		4301-50-2
41.	Fluoroacetic acid	1 kg		144-49-0
42.	Fluoroacetic acid, salts	1 kg		
43.	Fluoroacetic acid esters	1 kg		
44.	Fluoroacetic acid, amides	1 kg		
45.	4-Fluorobutyric acid	1 kg		
46.	4-Fluorobutyric acid, salts	1 kg		462-23-7
47.	4-Fluorobutyric acid esters	1 kg		
48.	4-Fluorobutyric acid, amides	1 kg		
49.	4-Fluorocrotonic acid	1 kg		
50.	4-Fluorocrotonic acid salts	1 kg		37759-72-1
51.	4-Fluorocrotonic acid esters	1 kg		
52.	4-Fluorocrotonic acid, amides	1 kg		
53.	4-Fluoro-2-hydroxybutyric acid	1 kg		

1.	2.	3.	4.	5.
54.	4-Fluoro-2-hydroxybutyric acid, salts	1 kg		
55.	4-Fluoro-2-hydroxybutyric acid, esters	1 kg		
56.	4-Fluoro-hydroxybutyric acid, amides	1 kg		
57.	Glycolonitrile (Hydroxyacetonitrile)	100 kg		107-16-4
58.	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	100 kg		19408-74-3
59.	Hexamethylphosphoramide	1 kg		680-31-9
60.	Hydrogen selenide	10 kg		7783-07-5
61.	Isobenzan	100 kg		297-78-9
62.	Isodrin	100 kg		465-73-6
63.	Juglone (5-Hydroxynaphthalene 1, 4-dione)	100 kg		481-89-0
64.	4,4'-Methylenebis (2-chloroaniline)	10 kg		101-14-4
65.	Methyl isocyanate	150 kg	150 kg	624-83-9
66.	Mevinphos	100 kg		7786-34-7
67.	2-Naphthylamine	1 kg		91-59-8
68.	Nickel (metal, oxides, carbonates, sulphide, as powders)	1 t		
69.	Nickel tetracarbonyl	10 kg		13463
70.	Oxydisolfoton	100 kg		2497-07-6
71.	Oxygen difluoride	10 kg		7783-41-7
72.	Paraoxon (Diethyl 4-nitrophenyl phosphate)	100 kg		311-45-5
73.	Parathion	100 kg		56-38-2
74.	Parathion-methyl	100 kg		298-00-0
75.	Pentaborane	100 kg		19624-22-7
76.	Phorate	100 kg		298-02-2
77.	Phosacetim	100 kg		4104-14-7
78.	Phosgene (carbonyl chloride)	750 kg	750 kg	75-44-5
79.	Phosphamidon	100 kg		13171-21-6
80.	Phosphine (Hydrogen phosphide)	100 kg		7803-51-2
81.	Promurit (1-(3, 4-Dichlorophenyl)-3-triazazethiocarboxamide)	100 kg		5836-73-7
82.	1, 3-Propanesultone	1 kg		1120-71-4
83.	1-Propen-2-chloro-1, 3-diol diacetate	10 kg		10118-72-6
84.	Pyrazoxon	100 kg		108-84-9
85.	Selenium hexafluoride	10 kg		7783-79-1
86.	Sodium selenite	100 kg		10102-18-8
87.	Stibine (Antimony hydride)	100 kg		7803-52-3
88.	Sulfotep	100 kg		3689-24-5
89.	Sulphur dichloride	100 kg		10545-99-0
90.	Tellurium hexafluoride	1 t		7783-80-4
91.	TEPP	100 kg		107-49-3
92.	2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin (TCDD)	1 kg		1746-01-6
93.	Tetramethylenedisulphotetramine	1 kg		80-12-6
94.	Thionazin	100 kg		297-97-2
95.	Tirpate (2,4-Dimethyl-1, 3-dithiolane-2-carboxaldehyde O-methylcarbamoyloxime)	100 kg		26419-73-8
96.	Trichloromethanesulphenyl chloride	100 kg		594-42-3
97.	1-Tri(cyclohexyl) stannyl-1H-1, 2, 4-triazole	100 kg		41083-11-8
98.	Triethylenemelamine	10 kg		51-18-3
99.	Warfarin	100 kg		81-81-2
<b>GROUP 2-TOXIC SUBSTANCES</b>				
100.	Acetone cyanohydrin (2-Cyanopropan-2-01)	200 t		75-86-5
101.	Acrolein (2-Propenal)	20 t		107-02-8
102.	Acrylonitrile	20 t	200 t	107-13-1
103.	Allyl alcohol (Propen-1-ol)	200 t		107-18-6
104.	Allylamine	200 t		107-11-9
105.	Ammonia	50 t	500 t	7664-41-7
106.	Bromine	40 t		7726-95-6
107.	Carbon disulphide	20 t	200 t	75-15-0
108.	Chlorine	10 t	25 t	7782-50-5
109.	Diphenyl methane di-isocyanate (MDI)	20 t		101-68-8
110.	Ethylene dibromide (1, 2-Dibromoethane)	5 t		106-93-4
111.	Ethyleneimine	50 t		151-56-4
112.	Formaldehyde (concentration $\leq$ 90%)	5 t		50-00-0
113.	Hydrogen chloride (liquified gas)	25 t	250 t	7647-01-0
114.	Hydrogen cyanide	5 t	20 t	74-90-8

1.	2.	3.	4.	5.
115.	Hydrogen fluoride	5 t	50 t	7664-39-3
116.	Hydrogen sulphide	5 t	50 t	7783-06-4
117.	Methyl bromide (Bromomethane)	20 t		74-83-9
118.	Nitrogen oxides	50 t		11104-93-1
119.	Propyleneimine	50 t		75-55-8
120.	Sulphur dioxide	20 t	250 t	7446-09-5
121.	Sulphur trioxide	15 t	75 t	7446-11-9
122.	Tetraethyl lead	5 t		78-00-2
123.	Tetramethyl lead	5 t		75-74-1
124.	Toluene di-isocyanate (TDI)	10 t		584-84-9 75,01-4
<b>GROUP 3 — HIGHLY REACTIVE SUBSTANCES</b>				
125.	Acetylene (ethyne)	5 t		74-86-2
126.	a. Ammonium nitrate (1) b. Ammonium nitrate in form of fertiliser (2)	350 t 1 250 t	2 500 t	6484-52-2
127.	2, 2-Bis (tert-butylperoxy) butane (concentration $\geq$ 70%)	5 t		2167-23-9
128.	1,1-Bis (tert-butylperoxy) cyclohexane (concentration $\geq$ 80%)	5 t 5 t		3006-86-8 3006-86-8
129.	tert-Butyl prexyacetate (concentration $\leq$ 70%)	5 t		107-71-1
130.	tert-Butyl peroxyisobutyrate (concentration $\geq$ 80%)	5 t		109-13-7
131.	tert-Butyl peroxy isopropyl carbonate (concentration $\geq$ 80%)	5 t		2372-21-6
132.	tert-Butyl peroxymaleate (concentration $\geq$ 80%)	5 t		1931-2-0
133.	tert-Butyl peroxy pivalate (concentration $\geq$ 77%)	50 t		927-07-1
134.	Dibenzyl peroxydicarbonate (concentration $\geq$ 90%)	5 t		2144-45-8
135.	Di-sec-Butyl peroxydicarbonate (concentration $\geq$ 80%)	5 t		19910-5-0
136.	Diethyl peroxydicarbonate (concentration 30%)	50 t		14666-78-5
137.	2, 2-Dihydroperoxypropane (concentration $\geq$ 30%)	5 t		2614-76-8
138.	Di-isobutyl peroxide (Concentration 50%)	50 t		3437-84-1
139.	Di-n-propyl peroxydicarbonate (concentration $\geq$ 80%)	5 t		16066-38-9
140.	Ethylene oxide	5 t	50 t	75-21-8
141.	Ethyl nitrate	50 t		625-58-1
142.	3, 3, 6, 6, 9, 9-Hexamethyl-1,2,4,5-tetrooxacyclononane (concentration $\geq$ 75%)	50 t		22397-33-7
143.	Hydrogen	2 t	50 t	1333-74-0
144.	Liquid oxygen	200 t		7782-44-7
145.	Methyl ethyl ketone peroxide (concentration $\geq$ 60%)	5 t		1338-23-4
146.	Methyl isobutyl ketone peroxide (concentration $\geq$ 60%)	50 t		37206-20-5
147.	Peracetic acid (concentration 60%)	50 t		79-21-0
148.	Propylene oxide	5 t		75-56-9
149.	Sodium chlorate	25 t		7775-09-9
<b>GROUP 4 — EXPLOSIVE SUBSTANCES</b>				
150.	Barium azide	50 t		18810-58-7
151.	Bis (2, 4, 6-trinitrophenyl) amine	50 t		131-73-7
152.	Chlorotrinitrobenzene	50 t		28260-61-9
153.	Cellulose nitrate (containing 12.6% Nitrogen)	50 t		9004-70-0
154.	Cyclotetramethylenetrinitramine	50 t		2691-41-0
155.	Cyclotrimethylenetrinitramine	50 t		121-82-4
156.	Diazodinitrophenol	10 t		7008-81-3
157.	Diethylene glycol dinitrate	10 t		693-21-0
158.	Dinitrophenol salts	50 t		628-96-6
159.	Ethylene glycol dinitrate	10 t		109-27-3
160.	1-Guanyl-4-nitrosaminoguanyl-1-tetrazene	10 t		20062-22-0
161.	2, 2', 4, 4', 6, 6'-Hexanitrostilbene	50 t		13464-97-6
162.	Hydrazine nitrate	50 t		13424-46-9
163.	Lead azide	50 t		15245-44-0
164.	Lead styphnate (Lead 2, 4, 6- trinitroresorcinoxide)	50 t		20820-45-5
165.	Mercury fulminate	10 t		628-86-4
166.	N-Methyl-N, 2, 4, 6-tetranitroaniline	50 t		479-45-8
167.	Nitroglycerine	10 t		55-63-0
168.	Pentaerythritol tetranitrate	50 t		78-11-5
169.	Picric acid (2,4, 6-Trinitrophenol)	50 t		88-89-1
170.	Sodium picramate	50 t		831-52-7
171.	Styphnic acid (2, 4, 6-Trinitroresorcinol)	50 t		82-71-3
172.	1, 3, 5-Triamino-2, 4, 6-trinitrobenzene	50 t		3058-38-6
173.	Trinitroaniline —	50 t		26952-42-1

1.	2.	3.	4.	5.
174.	2, 4, 6-Trinitroanisole.	50 t		606-35-9
175.	Trinitrobenzene	50 t		25377-32-6
176.	Trinitrobenzoic acid	50 t		35860-50-5
177.	Trinitrocresol	50 t		129-66-8
178.	2, 4, 6-Trinitrophenitol	50 t		28905-71-7
179.	2, 4, 6-Trinitrotoluene	50 t	50 t	4732-14-3
				118-96-7

## PART - II

## Classes of substances not specifically named in Part I

1.	2.	3.	4.	5.
<b>GROUP 5-FLAMMABLE SUBSTANCES</b>				
1.	Flammable gases: Substances which in the gaseous state at normal pressure and mixed with air become flammable and the boiling point of which at normal pressure is 20°C or below;	15 t		200 t
2.	Highly flammable liquids: Substances which has a flash point lower than 23°C and the boiling point of which at normal pressure is above 20°C;	1000 t		50 000 t
3.	Flammable liquids: Substances which have a flash point lower than 65°C and which remain liquid under pressure where particular processing conditions, such as high pressure and high temperature, may create major accident hazards.	25 t		200 t

- (1) This applies to ammonium nitrate and mixtures of ammonium nitrate where the nitrogen content derived from the ammonium nitrate is greater than 28% by weight and aqueous solutions of ammonium nitrate where the concentration of ammonium nitrate is greater than 90% by weight.
- (2) This applies to straight ammonium nitrate fertilizers and to compound fertilizers where the nitrogen content derived from the ammonium nitrate is greater than 28% by weight (a compound fertilizer contains ammonium nitrate together with phosphate and/or potash).

## SCHEDEULE 4

[See rule 2 (h) (i)]

1. Installations for the production, processing or treatment of organic or inorganic chemicals using for this purpose, among others:
  - (a) alkylation
  - (b) Amination by ammonolysis
  - (c) carbonylation
  - (d) condensation
  - (e) dehydrogenation
  - (f) esterification
  - (g) halogenation and manufacture of halogens
  - (h) hydrogenation
  - (i) hydrolysis
  - (j) Oxidation
  - (k) polymerization
  - (l) sulphonation
  - (m) desulphurization, manufacture and transformation of sulphur-containing compounds
  - (n) nitration and manufacture of nitrogen-containing compounds
  - (o) manufacture of phosphorous-containing compounds
  - (p) formulation of pesticides and of pharmaceutical products
  - (q) distillation
  - (r) extraction
  - (s) solvation
  - (t) mixing
2. Installations for distillation, refining or other processing of petroleum or petroleum products.
3. Installations for the total or partial disposal of solid or liquid substances by incineration or chemical decomposition.
4. Installations for production, processing or treatment of energy gases, for example, LPG, LNG, SNG.
5. Installations for the dry distillation of coal or lignite.
6. Installations for the production of metals or non-metals by a wet process or by means of electrical energy.

## SCHEDULE - 5

[See Rules 2(b) and (3)]

Sl. No.	Authority (ies) with legal backing	Duties and corresponding Rule
1	2	3
1.	Ministry of Environment and Forests under Environment (Protection) Act, 1986.	(1) Notification of hazardous chemicals as per Rules 2(e) (i) 2(e) (ii) & 2(e) (iii)
2.	Chief Controller Imports & Exports under Import & Export (Control) Act, 1947.	Import of hazardous chemicals as per Rule 18.
3.	Central Pollution Control Board or State Pollution Control Board under Environment (Protection) Act, 1986 as the case may be.	(1) Enforcement of directions and procedures in respect of isolated storage of hazardous chemicals, regarding. (i) Notification of major accidents as per Rules 5(1) and 5(2) (ii) Notification of sites as per Rules 7 to 9. (iii) Safety reports in respect of isolated storages as per Rule 10 to 12. (iv) Preparation of on-site emergency plans as per Rule 13.
4.	Chief Inspector of Factories appointed under the Factories Act, 1948.	(2) Import of hazardous chemicals and enforcement of directions and procedures on import of hazardous chemicals as per Rule 18. Enforcement of directions and procedures in respect of industrial installations and isolated storages dealing with hazardous chemicals and pipelines including inter-state pipelines regarding.— (i) Notification of major accidents as per Rule 5(1) and 5(2). (ii) Notification of sites as per Rules 7-9. (iii) Safety reports as per Rules 10 to 12. (iv) Preparation of on-site emergency plans as per Rule 13. (v) Preparation of off-site emergency plans in consultation with District Collector or District Emergency Authority as per Sr. No. 9 of this Schedule.
5.	Chief Inspector of Dock Safety appointed under the Dock Workers (Safety, Health and Welfare) Act, 1986.	Enforcement of directions and procedures in respect of industrial installations and isolated storages dealing with hazardous chemicals and pipelines inside a port regarding.— (i) Notification of major accidents as per Rules 5(1) and 5(2). (ii) Notification of sites as per Rules 7 to 9. (iii) Safety reports as per Rules 10 to 12. (iv) Preparation of on-site emergency plans as per Rule 13. (v) Preparation of off-site emergency plans in consultation with District Collector or District Emergency Authority as per S. No. 9 of this Schedule.
6.	Chief Inspector of Mines appointed under the Mines Act, 1952.	Enforcement of directions and procedures in respect of industrial installations and isolated storages dealing with the hazardous chemicals and pipelines including inter-state pipelines regarding.— (i) Notification of major accidents as per Rule 5(1) and 5(2). (ii) Notification of sites as per Rules 7 to 9. (iii) Safety reports as per Rules 10 to 12. (iv) Preparation of on-site emergency plans as per Rule 13. (v) Preparation of off-site emergency plans in consultation with District Collector or District Emergency Authority as per S. No. 9 of this Schedule.
7.	Atomic Energy Regulatory Board appointed under the Atomic Energy Act, 1972.	Enforcement of directions and procedures as per the provisions of the Atomic Energy Act, 1972.
8.	Chief Controller of Explosives appointed under the Indian Explosives Act and Rules, 1983.	Enforcement of directions and procedures as per the provisions of the Indian Explosives Act and Rules, 1983.
9.	District Collector of District Emergency Authority designated by the State Government.	Preparation of off-site emergency plans as per Rule 14.

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## SCHEDULE 6

[See rule 5(1)]

Information to be furnished regarding notification of a major accident

Report number .....  
of the particular accident.

## 1. General data

- (a) Name of the site
- (b) Name and address of the manufacturer  
(Also state telephone/telex number)
- (c)
  - (i) Registration number
  - (ii) Licence number

(As may have been allotted under any statute applicable to the site, e.g. the Factories Act)
- (d)
  - (i) Nature of industrial activity (Mention what is actually manufactured, stored etc.)
  - (ii) National Industrial Classification, 1987 at the four digit level.

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## 2. Type of major accident

Explosion

--

Fire

--

Emission of  
dangerous  
substance

--

Substance(s) Emitted .....

## 3. Description of the major accident

- (a) Date, shift and hour of the accident
- (b) Department/Section and exact place where the accident took place
- (c) The process/Operation undertaken in the Department/Section where the accident took place.  
(Attached a flow chart, if necessary)
- (d) The circumstances of the accident and the dangerous substance involved.

## 4. Emergency measures taken and measures envisaged to be taken to alleviate short term effects of the accident.

## 5. Causes of the major accident

Known (to be specified)

--

Not known

--

Information will be supplied as soon as possible.

--

## 6. Nature and extent of damage

- (a) Within the establishment — casualties

Killed

Injured

Poisoned

persons exposed to the major accident —

material damage

--

danger is still present

--

danger no longer exists

--

(b) Outside the establishment casualties	Killed Injured Poisoned
--	-------------------------------

persons exposed to the major accident .....

material damage

--

damage to environment

--

the danger is still present

--

the danger no longer exists

--

7 Data available for assessing the effects of the accident on persons and environment.

8. Steps already taken or envisaged

- (a) to alleviate medium or long term effects of the accident.
- (b) to prevent recurrence of similar major accidents
- (c) Any other relevant information.

#### SCHEDULE 7

[See rule 7 (1)]

#### Information to be furnished for the Notification of Sites

##### PART—I

Particulars to be included in a notification of a site.

1. The name and address of the employer making the notification.
2. The full postal address of the site where the notifiable industrial activity will be carried on.
3. The area of the site covered by the notification and of any adjacent site which is required to be taken into account by virtue of b(ii) of Schedules 2 and 3.
4. The date on which it is anticipated that the notifiable industrial activity will commence, or if it has already commenced a statement to that effect.
5. The name and maximum quantity liable to be on the site of each dangerous substance for which notification is being made.
6. Organisation structure, namely organisation diagram for the proposed industrial activity and set up for ensuring safety and health.
7. Information relating to the potential for major accidents, namely—
  - (a) identification of major accident hazards;
  - (b) the conditions or events which could be significant in bringing one about;
  - (c) a brief description of the measures taken
8. Information relating to the site namely—
  - (a) a map of the site and its surrounding area to a scale large enough to show any features that may be significant in the assessment of the hazard or risk associated with the site.
    - (i) area likely to be affected by the major accident.
    - (ii) population distribution in the vicinity.
  - (b) a scale plan of the site showing the location and quantities of all significant inventories of the hazardous chemicals;
  - (c) a description of the process or storage involving the hazardous chemicals and an indication of the conditions under which it is normally held;
  - (d) the maximum number of persons likely to be present on site.
9. The arrangement for training of workers and equipment necessary to ensure safety of such work.

##### PART II

Particulars to be included regarding pipeline—

1. The names and the address of the person making the notification.
2. The full postal address of the place from which the pipeline activity is controlled, addresses of the places where the pipeline starts and finishes and a map showing the pipeline route drawn to a scale of not less than 1 : 400000
3. The date on which it is anticipated that the notifiable activity will commence, or if it is already commenced a statement to that effect.
4. The total length of the pipeline, its diameter and normal operating pressure and the name and maximum quantity liable to be in the pipeline of each hazardous chemical for which notification is being made.

## SCHEDULE 8

[See rule 10(1)]

## Information to be furnished in a Safety Report

1. The name and address of the person furnishing the information.
2. Description of the industrial activity, namely—
  - (a) site,
  - (b) construction design,
  - (c) protection zones<sup>s</sup> explosion protection, separation distances,
  - (d) accessibility of plant,
  - (e) maximum number of persons working on the site and particularly of those persons exposed to the hazard.
3. Description of the processes, namely—
  - (a) technical purpose of the industrial activity,
  - (b) basic principles of the technological process,
  - (c) process and safety-related data for the individual process stages,
  - (d) process description,
  - (e) safety-related types of utilities.
4. Description of the hazardous chemicals, namely—
  - (a) chemicals (quantities, substance data, safety-related data, toxicological data and threshold values),
  - (b) the form in which the chemical may occur on or into which they may be transformed in the event of abnormal conditions,
  - (c) the degree of purity of the hazardous chemical.
5. Information on the preliminary hazard analysis, namely—
  - (a) types of accident,
  - (b) system elements or events that can lead to a major accident,
  - (c) hazards,
  - (d) safety—relevant components.
6. Description of safety—relevant units, among others;
  - (a) Special design criteria,
  - (b) controls and alarms,
  - (c) special relief systems,
  - (d) quick-acting valves,
  - (e) collecting tanks/dump tank,
  - (f) sprinkler system,
  - (g) fire-fighting etc.
7. Information on the hazard assessment, namely—
  - (a) identification of hazards,
  - (b) the causes of major accidents,
  - (c) assessment of hazards according to their occurrence frequency,
  - (d) assessment of accident consequences,
  - (e) safety systems,
  - (f) known accident history.
8. Description of information on organisational systems used to carry on the industrial activity safety, namely—
  - (a) maintenance and inspection schedules,
  - (b) guidelines for the training of personnel,
  - (c) allocation and delegation of responsibility for plant safety,
  - (d) implementation of safety procedures.
9. Information on assessment of the consequences of major accidents, namely—
  - (a) assessment of the possible release of hazardous chemicals or of energy
  - (b) possible dispersion of released chemical
  - (c) assessment of the effects of the releases (size of the affected area, health effects, property damage).
10. Information on the mitigation of major accidents, namely—
  - (a) fire brigade
  - (b) alarm systems,

- (c) emergency plan containing system of organisation used to fight the emergency, the alarm and the communication routes, guidelines for fighting the emergency, information about hazardous chemicals, examples of possible accident sequences,
- (d) coordination with the District Emergency authority and its off-site emergency plan,
- (e) notification of the nature and scope of the hazard in the event of an accident,
- (f) antidotes in the event of a release of a hazardous chemical.

## SCHEDEULE 9

(See Rule 17)

## Safety Data Sheet

## 1. CHEMICAL IDENTITY

Chemical Name	Chemical Classification		
Synonyms	Trade Name		
Formula	C.A.S. No.	U.N. No.:	
Regulated Identification	Shipping Name Codes/Label		Hazchem No.
	Hazardous Waste I.D. No.:		
Hazardous Ingredients	C.A.S. No.	Hazardous Ingredients	C.A.S. No.
1.		3.	
2.		4.	

## 2. PHYSICAL AND CHEMICAL DATA

Boiling Range/Point	°C	Physical State	Appearance
Melting/Freezing Point	°C	Vapour Pressure @ 35°C mm Hg	Odour
Vapour Density (Air = 1)		Solubility in water @ 30°C	Others
Specific Gravity pH		Water = 1	

## 3. FIRE AND EXPLOSION HAZARD DATA

Flammability Yes/No	LEL	% Flash Point °C	Autoignition Temperature °C
TDG Flammability	UEL	% Flash Point °C	Hardous Combustion Products
Explosion Sensitivity to Impact		Explosion Sensitivity to Static Electricity	

## Hazardous Polymerisation

Combustible Liquid	Explosive Material	Corrosive Material	
Flammable Material		Oxidiser	Others
Pyrophoric Material		Organic Peroxide	

## 4. REACTIVITY DATA

Chemical Stability			
Incompatibility with other Material			
Reactivity			

Hazardous Reaction  
Products

## 5. HEALTH HAZARD DATA

Routes of  
EntryEffects of  
Exposure/SymptomsEmergency  
Treatment

TLV (ACGIH)	ppm	mg/m <sup>3</sup>	STEL	ppm	mg/m <sup>3</sup>
Permissible Exposure Limit LD <sub>50</sub>	ppm	mg/m <sup>3</sup>	Odour Threshold LD <sub>50</sub>	ppm	mg/m <sup>3</sup>
NFPA Hazard Signals	Health		Flammability	Stability	Special

## 6. PREVENTIVE MEASURES

Personnel  
Protective  
EquipmentHandling and  
Storage  
Precautions

## 7. EMERGENCY AND FIRST AID MEASURE

FIRE	FIRE EXTINGUISHING Media
FIRE	Special Procedures
	Unusual Hazards
EXPOSURE	First Aid Measures
	Antidotes/Dosages
SPILLS	Steps to be taken
	Waste Disposal Method

## 8. ADDITIONAL INFORMATION/REFERENCES

## 9. MANUFACTURER/SUPPLIERS DATA

Name of Firm Mailing Address Telephone/Telex Nos. Telegraphic Address	Contact Person in Emergency
	Local Bodies involved
	Standard Packing
	Tremcard Details/Ref
	Other

## 10. DISCLAIMER

Information contained in this material data sheet is believed to be reliable but no representation, guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application or results to be obtained from them. It is upto the manufacturer/seller to ensure that the information contained in the material safety data sheet is relevant to the product manufactured/handled or sold by him as the case may be. The Government makes no warranties expressed or implied in respect of the adequacy of this document for any particular purpose.

## SCHEDULE 10

[See Rule 18(5)]

(Format for maintaining records of hazardous chemicals imported)

1. Name and address of the Importer:
2. Date and reference number of issuance of permission to import hazardous chemicals:
3. Description of hazardous chemicals:
  - (a) Physical form:
  - (b) Chemical form:
  - (c) Total volume and weight  
(in kilogrammes/tonnes)
4. description of purpose of import:
5. Description of storage of hazardous chemicals:
  - (a) Date:
  - (b) Method of storage

[17(1)/87-PL/HSMD]

Dr. G. SUNDARAM, Jt. Secy.